

REMARKS

It is noted, with appreciation, that the Examiner, although objected to claims 2-19 as being dependent upon a rejected base claim, would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 1 has been rejected by the Examiner under 35 U.S.C. 102(b) as being anticipated by Noguchi et al., JP07027426. This rejection is respectfully traversed.

The Examiner, in rejecting claim 1 in the present application as being anticipated by Noguchi et al., states that the reference patent discloses an air conditioner with stabilizing control. The controller comprises a variation of the expansion valve opening as a function of the superheat degree when compressor operated at a predetermined frequency. However, as understood by the Applicant, the Japanese reference discloses an arithmetic processor for controlling the variation in the opening of the valve when the variation width within a predetermined time of a valve for effecting influence to degree of the superheat is a predetermined value or more. In detail, that the arithmetic processor of the Japanese reference controls the opening of the valve based on the suction temperature variation of the compressor (please see the description in paragraph [0025]). Also, the arithmetic processor controls the opening of the valve based on the degree of superheat variation (please see the description in paragraph [0031] and [0033]). Further, the degree of super heat in the cited reference is defined between the suction temperature of the compressor and the temperature of the outdoor unit or between the suction temperature of the compressor and the temperature of the indoor unit. On the other hand, according to the present invention as defined in claim 1 of the present application, the opening of the expansion valve is controlled on the basis of a temperature change rate of the condenser and the degree of superheat of refrigerant at an outlet of the compressor. In the present invention the degree of superheat of the refrigerant at the outlet of the compressor which represents a valve pipeline temperature of the condenser is detracted from the temperature of the refrigerant discharged from the compressor (please see in this regard the description set forth in paragraph [0010]).

Accordingly, it is clear that the Japanese reference fails to disclose a stabilizing step which is preformed on the basis of data including a temperature change rate of the condenser and

the degree of superheat of refrigerant at an outlet of the compressor in order to regulate the opening of an expansion valve.

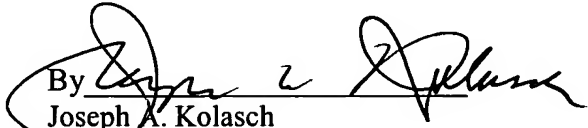
Because of the difference in operating methods from the present invention when compared to the prior art Japanese reference, it is believed that the Examiner's rejection of claim 1 is untenable and accordingly reconsideration of the rejection of claim 1 in allowance of all the claims in the present application are respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Joseph A. Kolasch (Reg. No. 22,463) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Dated: August 18, 2006

Respectfully submitted,

By 
Joseph A. Kolasch

Registration No.: 22,463

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorneys for Applicant